

REMARKS

Summary Of The Office Action & Formalities

Status of Claims

Claims 1-16 have been examined. By this Amendment, Applicant is amending claims 2-9, 11-14 and 16, and adding new claims 17-26. Claim 1 has been canceled without prejudice or disclaimer. Applicant reserves the right to pursue claim 1 in a divisional or continuation application. No new matter is added.

Additional Fees

Submitted herewith is a Petition for Extension of Time with fee and an Excess Claim Fee Payment Letter with fee.

Drawings

Again, Applicant thanks the Examiner for acknowledging and accepting the drawings filed on July 7, 2008.

Claim Objections

Claim 16 is objected to at page 5 of the Office Action because claim 16 states the identifier "original", however claim 16 is a "new" claim. Applicant has corrected the claim status identifier to overcome this objection.

Art Rejections

1. Claims 1-4, 7-11 and 13-15 are rejected under 35 U.S.C. § 102(b) as being anticipated by Goodman (US 6,192,399).
2. Claims 5, 6 and 12 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Goodman (US 6,192,399).

3. Claim 16 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Goodman (US 6,192,399) in view of Fenouil (US 6,240,554).

Applicant respectfully traverses.

Claim Rejections - 35 U.S.C. § 102

1. Claims 1-4, 7-11 and 13-15 In View Of Goodman (US 6,192,399).

Claim 1 has been canceled and dependent claims 2-4, 7-11 and 13-15 have been amended to be dependent upon claim 16. Therefore, Applicant submits the rejection is moot and respectfully requests the Examiner to withdraw this rejection.

Claim Rejections - 35 U.S.C. § 103

1. Claims 5, 6 and 12 Over Goodman (US 6,192,399).

Dependent claims 5, 6 and 12 have been amended to be dependent upon claim 16. Therefore, Applicant submits the rejection is moot based on the rejection under 35 U.S.C. § 102 and respectfully requests the Examiner to withdraw this rejection.

2. Claim 16 Over Goodman (US 6,192,399) in view of Fenouil (US 6,240,554).

In rejecting claim 16 over Goodman (US 6,192,399) in view of Fenouil (US 6,240,554), the grounds of rejection state:

Referring to claim 16, Goodman discloses video signal sources (see **Figure 9 and Column 11, Lines 4-16 for hub 800 receiving a plurality of television signals (sources) from video source 820.**)

Goodman also discloses video signal receivers (see **televisions 154 in Figures 2-3.**)

Goodman also discloses a central processing and multiplexing unit (see **Figure 9 and Column 10, Lines 66 through Column 11, Line 39 for hub 800 processing and multiplexing signals.**)

Goodman also discloses a twisted pairs network comprising four pairs of twisted wires (see Figure 16 and Column 17, Lines 32 through Column 18, Line 4 for the system of Goodman using a 100BaseT4 device to process signals from four UTP/pairs of wires). The examiner is aware that only three of the UTP/pairs of wires are used by the 100BaseT4 device to transmit data, however if only three of the four pairs of twisted wires are used to transmit signals, this does not exclude that the entire twisted pairs network comprise four pairs of twisted wires, which is clearly taught by Goodman above.

Goodman fails to teach that one pair of the twisted pairs network is a service pair that routes source signals and control signals to the central processing and multiplexing unit and that a different pair of the twisted pairs network is a distribution pair that routes processed signals from the processing and multiplexing unit to the receivers.

Fenouil also discloses a twisted pairs network comprising four pairs of twisted wires (see Column 8, Line 66 through Column 9, Line 8 for transmitting and receiving audio, video and data signals over a twisted pairs network comprising eight pins/four pairs), wherein one pair of the twisted pairs network is a service pair that routes source signals and control signals to the central processing and multiplexing unit (see Figure 4 and Column 8, Lines 66 through Column 9, Line 8 for transmitting audio source signals and control signals on pins 1 and 2 of the *(four pair)* twisted pair network to hub 100 in Figure 4 and therefore clearly teaches a service pair that routes/transmits source (*audio*) and control signals to the hub 100/central processing and multiplexing device) and that a different pair of the twisted pairs network is a distribution pair that routes processed signals from the processing and multiplexing unit to the receivers (see Figure 4 and Column 8, Line 66 through Column 9, Line 8 for receiving the processed audio and control signals (see Column 10, Line 47 through Column 11, Line 17 for processing a video signal before transmission) from hub 100 on pins 3 and 6 of the *(four pair)* twisted pair network and therefore clearly teaches a different pair used for distributing processed signals from the hub 100/processing and multiplexing unit).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the twisted pairs network, as taught by Goodman, using the routing functionality that allows source signals to be transmitted back to a

central processing and multiplexing unit, as taught by Fenouil, for the purpose of providing a bi-directional transmission of video bandwidth signals which is very versatile while also being very cost effective (see Column 1, Lines 64-67 of Fenouil).

Office Action at pages 14-16.

As noted above, the Examiner acknowledges that Goodman fails to teach that one pair of the twisted pairs network is a service pair that routes source signals and control signals to the central processing and multiplexing unit and that a different pair of the twisted pairs network is a distribution pair that routes processed signals from the processing and multiplexing unit to the receivers. Therefore, the Examiner relies on Fenouil to correct this deficiency.

Figure 12 of Fenouil showing a hub 100 on which two user interfaces 102C1 and 102C2 are connected by twisted pairs 404 and 430. For example, the pair 404 transmits (in and out: see the arrows) the video signals through the network, and pair 430 transmits (in and out: see the arrows) the audio and data signals through the network. So, the twisted pair network is quite split or divided in two sub-networks, one for the video signals and another one for the audio and data signals. This is different from claim 16, where the network is divided by up signals and down signals, and not according to the type (audio, video, data) of signals.

Furthermore, it is clear that Fenouil teaches that twisted pair 404 is used to output a video signal from user interface 102C1 and is also used to input a multiplexed processed/converted signal into user interface 102C1 (e.g., from user interface 102C2) (col. 10, line 48 to col. 11, line 17). Particularly, Fenouil teaches the central processor of hub 100C multiplexes a video signal such that it can be routed in one of three directions, and, if the signal is to go to another user, the signal is converted (processed) before being sent out over a twisted pair (col. 10, line 48 to col. 11, line 17). Thus, the video signal (source signal) output from the user interface 102C1 and the

multiplexed processed signal input to the user interface 102C1 from hub 100C are not separately carried by two pairs of twisted wires. Instead, twisted pair 404, for example, carries both of these signals. Accordingly, Fenouil does not teach or fairly suggest that “the up signals and the down signals are carried separately by the service pair and the distribution pair, respectively,” as recited in claim 16. Goodman also fails to teach this feature.

Accordingly, Fenouil fails to correct the deficiencies of Goodman.

In view of the above, Applicant submits that Goodman, alone or in combination with Fenouil, fails to teach or suggest each and every feature of claim 1. Thus, the Examiner is kindly requested to reconsider and withdraw the rejection and allow the claims to issue.

New Claims

By this Amendment, Applicant has added new claims 17-26 to further define the claimed invention. Applicants respectfully submit claims 17-26 recite additional features which are not taught or suggested by the prior art of record.

With respect to new claims 22 and 23, Fenouil teaches that the audio, data and video signals are distributed on the twisted pairs in the base band frequency, whereas in the present invention, the base band signals from the sources are modulated in large band frequency (AUDIO and VIDEO in HF on the CATV channel) by the central distribution unit and thereafter transmitted via the local network on the 1-2 twisted pair, as well as the IR signal on the 3-6 twisted pair. This large band channel is then multiplexed with the other channels received by the network.

To sum up, Fenouil works in base band frequency, and the invention works with modulated signals “compatible with transmission on the service pair and distribution pair” (i.e.,

in large band frequency), as recited in claims 22 and 23. Thus, Applicant submits that Fenouil does not teach or suggest this feature.

Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,


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